IN THE CLAIMS

Please cancel claims 3 and 13, and further amend the claims as indicated below.

1. (currently amended) A system comprising:

a modem for providing an output to a power line in a power line communication system;

a sensor for sensing a parameter of said output; and

a controller for adjusting a power of said output based on a value of said parameter,

wherein said output includes a first frequency sub-band and a second frequency sub-band, and

wherein said controller adjusts said power to a first power for said first frequency sub-band and a second power for said second frequency sub-band.

2. (previously presented) The system of claim 1, wherein said controller maximizes said power while limiting said power to a predetermined level of electromagnetic radiation.

3. (canceled)

4. (currently amended) ~~The system of claim 1,~~ A system comprising:

a modem for providing an output to a power line in a power line communication system;

a sensor for sensing a parameter of said output; and

a controller for adjusting a power of said output based on a value of said parameter,

wherein said modem provides said output by sequentially transmitting over a first frequency sub-band and a second frequency sub-band, and

wherein said controller adjusts said power to a first power for said first frequency sub-band and a second power for said second frequency sub-band.

5. (previously presented) The system of claim 1, wherein said parameter comprises an electromagnetic radiation.

6. (previously presented) The system of claim 1, wherein said parameter comprises a signal current in said power line.

7. (previously presented) The system of claim 1, wherein said parameter comprises a signal voltage on said power line.

8. (previously presented) The system of claim 1, wherein said parameter comprises a real component of said power.

9. (previously presented) The system of claim 8, wherein said sensor comprises a phase detector that receives an input indicative of said real component.

10. (previously presented) The system of claim 1,

wherein said output produces an electromagnetic radiation intensity from said power line,

wherein said parameter and said electromagnetic radiation form a ratio, and

wherein said controller adjusts said power to compensate for variations in said ratio over a transmitter frequency band of said modem.

11. (currently amended)A method comprising:

providing an output from a modem to a power line in a power line communication system;

sensing a parameter of said output; and

adjusting a power of said output based on a value of said parameter,

wherein said output includes a first frequency sub-band and a second frequency sub-band, and

wherein said adjusting comprises adjusting said power to a first power for said first frequency sub-band and a second power for said second frequency sub-band.

12. (original) The method of claim 11, wherein said adjusting comprises maximizing said power while limiting said power to a predetermined level of electromagnetic radiation.

13. (canceled)

14. (currently amended) ~~The method of claim 11,~~ A method comprising:

providing an output from a modem to a power line in a power line communication system;

sensing a parameter of said output; and

adjusting a power of said output based on a value of said parameter,

wherein said modem provides said output by sequentially transmitting over a first frequency sub-band and a second frequency sub-band, and

wherein said adjusting comprises adjusting said power to a first power for said first frequency sub-band and a second power for said second frequency sub-band.

15. (original) The method of claim 11, wherein said parameter comprises an electromagnetic radiation.

16. (original) The method of claim 11, wherein said parameter comprises a signal current in said power line.

17. (original) The method of claim 11, wherein said parameter comprises a signal voltage on said power line.

18. (previously presented) The method of claim 11, wherein said parameter comprises a real component of said power.

19. (previously presented) The method of claim 18, wherein said sensing is performed by a phase detector that receives an input indicative of said real component.

20. (original) The method of claim 11,

wherein said output produces an electromagnetic radiation intensity from said power line,

wherein said parameter and said electromagnetic radiation form a ratio, and

wherein said adjusting comprises adjusting said power to compensate for variations in said ratio over a transmitter frequency band of said modem.